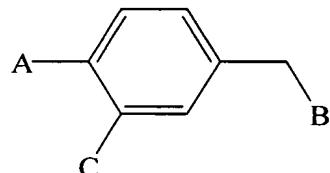


CLAIM AMENDMENTS

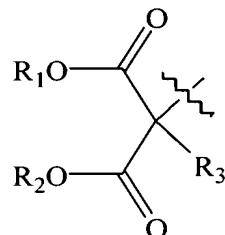
1. (Previously Presented) A compound of formula I:



(I),

wherein:

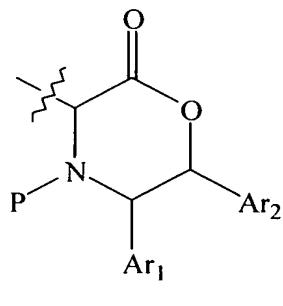
A is carboxyl, carboxyalkyl, dicarboxyalkyl, alkoxycarbonyl, alkoxycarbonylalkyl, dialkoxycarbonylalkyl, or a malonyl group of formula II:



(II),

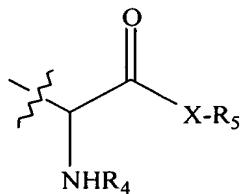
wherein R₁ and R₂ may be the same or different and are selected from the group consisting of hydrogen, alkyl, aryl, arylalkyl, alkylaryl, and heteroaryl; and R₃ is selected from the group consisting of hydrogen, halo, hydroxy, amino, alkyl, aryl, and alkoxy;

B has the formula III:



(III),

wherein P is an amine protecting group; and Ar₁ and Ar₂ are aryl groups; or the formula IV:



(IV),

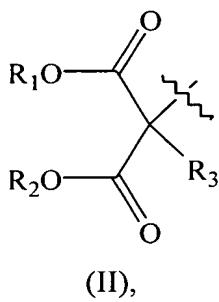
wherein X is NH or O; R_4 is hydrogen, alkyl, aryl, alkylaryl, arylalkyl, or an amine protective group; and R_5 is selected from the group consisting of hydrogen, alkyl, aryl, arylalkyl, alkylaryl, and heteroaryl; and

C is selected from the group consisting of hydrogen, hydroxyl, alkyl, alkylcarbonyl, alkylcarbonyloxy, alkoxy carbonyl, and alkoxy carbonyl alkyl;

wherein said aryl, heteroaryl, and the aryl portion of said arylalkyl and alkylaryl may be unsubstituted or substituted with a substituent selected from the group consisting of alkyl, hydroxy, halo, keto, amino, and alkoxy; with the provisos that (i) R_5 is not hydrogen when A is carboxyl or carboxyalkyl, C is hydrogen, B has the formula IV wherein R_4 is hydrogen or alkylcarbonyl, and X is NH; and (ii) R_5 is not hydrogen or alkyl when A is carboxyl or carboxyalkyl, C is hydrogen or hydroxy, B has the formula IV wherein R_4 is hydrogen or alkylcarbonyl, and X is O.

2. (Previously Presented) The compound of claim 1, wherein:

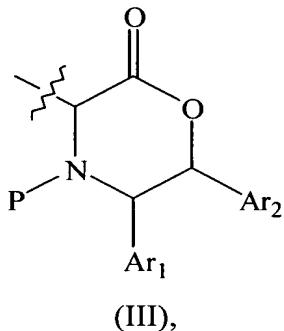
A is carboxyl, carboxyl $\text{C}_1\text{-C}_6$ alkyl, dicarboxy $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ alkoxy carbonyl, $\text{C}_1\text{-C}_6$ alkoxy carbonyl $\text{C}_1\text{-C}_6$ alkyl, $\text{C}_1\text{-C}_6$ dialkoxy carbonyl $\text{C}_1\text{-C}_6$ alkyl, or a malonyl group of formula II:



(II),

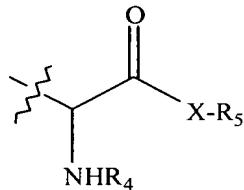
wherein R₁ and R₂ may be the same or different and are selected from the group consisting of hydrogen, C₁-C₆ alkyl, aryl, aryl C₁-C₆ alkyl, C₁-C₆ alkylaryl, and heteroaryl; and R₃ is selected from the group consisting of hydrogen, halo, hydroxy, amino, C₁-C₆ alkyl, aryl, and C₁-C₆ alkoxy;

B has the formula III:



(III),

wherein P is an amine protecting group; and Ar₁ and Ar₂ are aryl groups; or B has the formula IV:



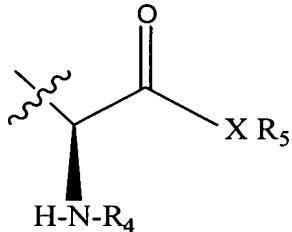
(IV),

wherein X is NH or O; R₄ is hydrogen, C₁-C₆ alkyl, aryl, C₁-C₆ alkylaryl, aryl C₁-C₆ alkyl, or an amine protecting group; and R₅ is selected from the group consisting of hydrogen, C₁-C₆ alkyl, aryl, aryl C₁-C₆ alkyl, C₁-C₆ alkylaryl, and heteroaryl; and

C is selected from the group consisting of hydrogen, hydroxyl, C₁-C₆ alkyl, C₁-C₆ alkylcarbonyl, C₁-C₆ alkylcarbonyloxy, C₁-C₆ alkoxy carbonyl, and C₁-C₆ alkoxy carbonyl C₁-C₆ alkyl; wherein said aryl, heteroaryl, and the aryl portion of said arylalkyl and alkylaryl may be unsubstituted or substituted with a substituent selected from the group consisting of C₁-C₆ alkyl, hydroxy, halo, keto, amino, and C₁-C₆ alkoxy.

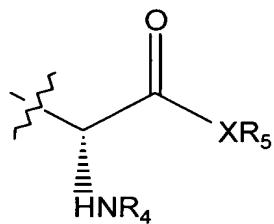
3. (Original) The compound of claim 2, wherein B has the formula IV.

4. (Previously Presented) The compound of claim 3, wherein B has the formula:



wherein X is NH or O; R₄ is hydrogen, C₁-C₆ alkyl, aryl, C₁-C₆ alkylaryl, aryl C₁-C₆ alkyl, or an amine protecting group; and R₅ is selected from the group consisting of hydrogen, C₁-C₆ alkyl, aryl, aryl C₁-C₆ alkyl, C₁-C₆ alkylaryl, and heteroaryl.

5. (Previously Presented) The compound of claim 3, wherein B has the formula:



wherein X is NH or O; R₄ is hydrogen, C₁-C₆ alkyl, aryl, C₁-C₆ alkylaryl, aryl C₁-C₆ alkyl, or an amine protecting group; and R₅ is selected from the group consisting of hydrogen, C₁-C₆ alkyl, aryl, aryl C₁-C₆ alkyl, C₁-C₆ alkylaryl, and heteroaryl.

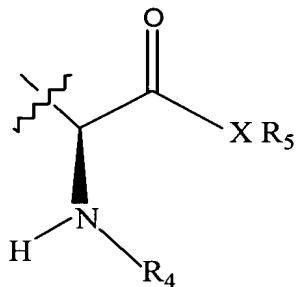
6. (Previously Presented) The compound of claim 4, wherein X is O.

7. (Original) The compound of claim 6, wherein R₄ is hydrogen.

8. (Original) The compound of claim 6, wherein R₄ is an amine protecting group.

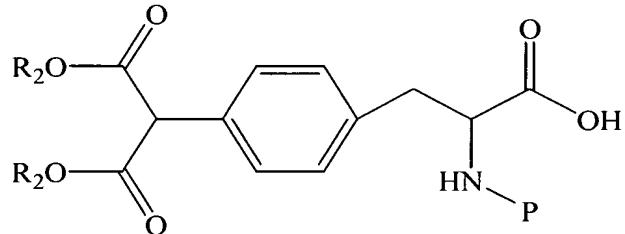
9. (Previously Presented) The compound of claim 8, wherein the amine protecting group is selected from the group consisting of fluorenylmethoxycarbonyl, tert-butoxycarbonyl, carbobenzoxy, and carbamoyl.

24. (Previously Presented) The compound of claim 1, wherein R₁ and R₂ are tert-butyl, R₃ is hydrogen, and B has the formula



wherein X is O, R₄ is fluorenylmethoxycarbonyl, and R₅ is hydrogen.

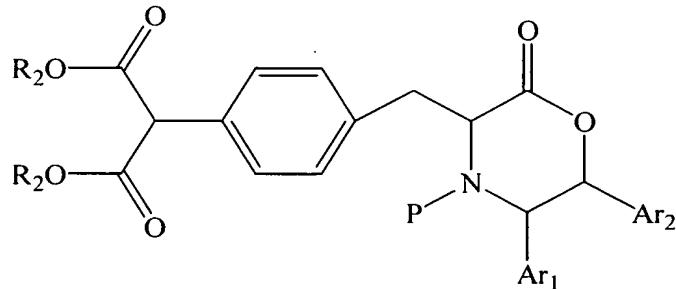
27. (Previously Presented) A process for preparing a compound of formula VIII:



(VIII),

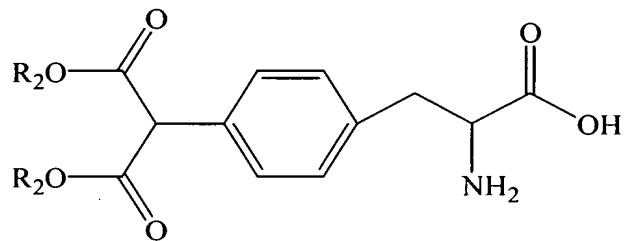
wherein R₂ is alkyl and P is an amine protecting group; the process comprising:

(a) reducing the compound of formula



(VII),

to obtain a compound of formula IX:

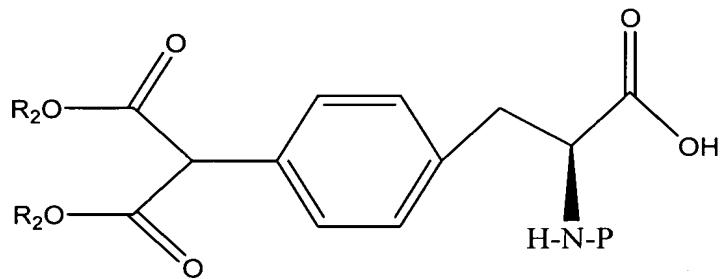


(IX);

and

(b) reacting the compound of formula IX with an amine protecting agent to obtain the compound of formula VIII.

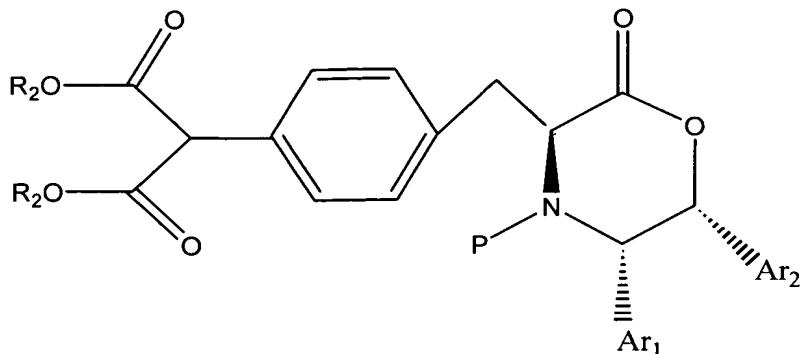
30. (Previously Presented) A process for preparing a compound of formula VIIa:



(VIIa)

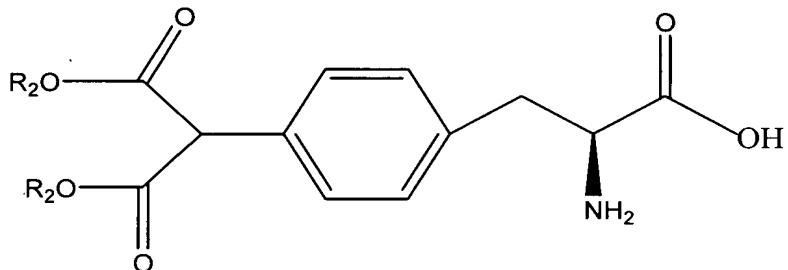
wherein R_2 is alkyl and P is an amine protecting group; the process comprising:

(a) reducing a compound of formula VII



(VIIa)

to obtain a compound of formula IXa:

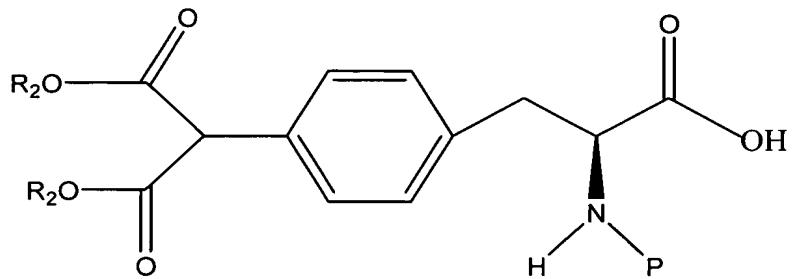


(IXa);

and

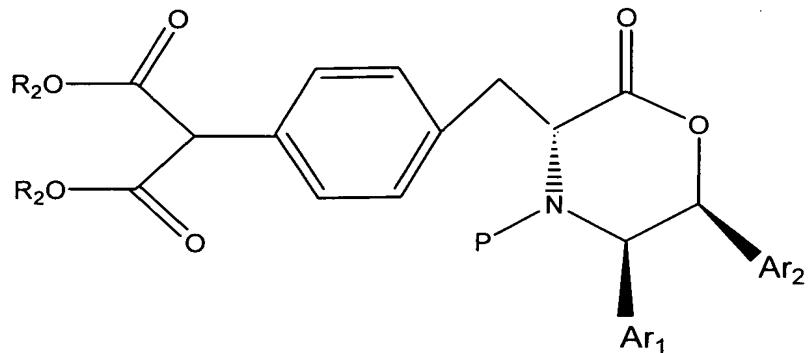
(b) reacting the compound of formula IXa with an amine protecting agent to obtain the compound of formula VIII.

31. (Previously Presented) A process for preparing a compound of the formula:

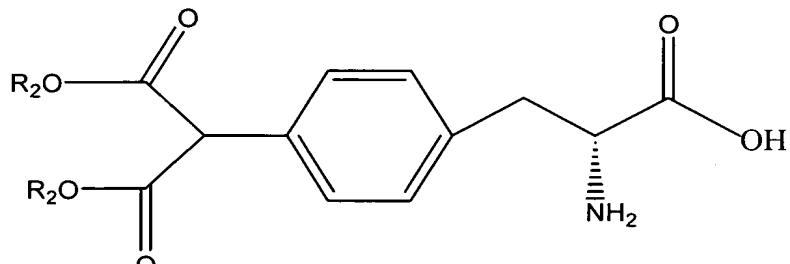


wherein R_2 is alkyl and P is an amine protecting group; the process comprising:

(a) reducing a compound of formula:



to obtain a compound of formula IXb:



(IXb);

and (b) reacting the compound of formula IXa with an amine protecting agent to obtain the compound of formula VIII.

35. (Previously Presented) A conjugate comprising a conjugant covalently linked to a compound of claim 1.

39. (Previously Presented) A compound of the formula:



wherein n is 0 to 15;

Y is a phenylalanyl radical having a phenyl ring, an amine end, and a carboxyl end, the phenyl ring having one or more substituents selected from the group consisting of hydroxyl, carboxyl, formyl, carboxyalkyl, carboxyalkyloxy, dicarboxyalkyl, dicarboxyalkyloxy, dicarboxyhaloalkyl, dicarboxyhaloalkyloxy, and phosphonoalkyl, phosphonohaloalkyl, wherein the alkyl portion of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, aminoalkyl, alkyl, alkoxy, and keto;

W is a moiety attached to the nitrogen of Y and is selected from the group consisting of alkylcarbonyl, oxalyl, alkylaminooxalyl, arylaminooxalyl, arylalkylaminooxalyl, alkoxyoxalyl, carboxyalkyl carbonyl, heterocycl carbonyl, heterocyclalkyl carbonyl, arylalkyl heterocyclalkyl carbonyl, aryloxycarbonyl, and arylalkoxycarbonyl, wherein the aryl and alkyl portions of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, aminoalkyl, alkyl, alkoxy, and keto; and the heterocycl portion of W contains at least 4 hetero atoms selected from the group consisting of O, N, and S;

AA is an amino acid, the amine end of which is attached to the carboxyl end of Y; and

Z is an arylalkylamino or arylheterocycl alkylamino;

or a salt thereof;

with the proviso that W is not arylalkylamino when the phenyl ring of phenylalanyl contains a phosphonoalkyl or phosphonohaloalkyl substituent at a position para to the alkylamido group and the ortho and meta positions are unsubstituted.

40. (Previously Presented) The compound of claim 39, wherein n is 0 to 15;

Y is a phenylalanyl radical having a phenyl ring, an amine end, and a carboxyl end, the phenyl ring having one or more substituents selected from the group consisting of hydroxyl, carboxyl, formyl, carboxy C₁-C₆ alkyl, carboxy C₁-C₆ alkyloxy, dicarboxy C₁-C₆ alkyl, dicarboxy C₁-C₆ alkyloxy, dicarboxyhalo C₁-C₆ alkyl, dicarboxyhalo C₁-C₆ alkyloxy, and phosphono C₁-C₆ alkyl, phosphonohalo C₁-C₆ alkyl, wherein the alkyl portion of the

substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, aminoalkyl, C₁-C₆ alkyl, C₁-C₆ alkoxy, and keto;

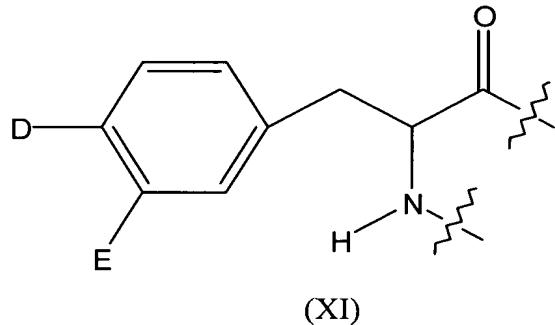
W is a moiety attached to the nitrogen of Y and is selected from the group consisting of C₁-C₆ alkylcarbonyl, oxalyl, C₁-C₆ alkylaminooxalyl, arylaminooxalyl, aryl C₁-C₆ alkylaminooxalyl, C₁-C₆ alkoxyoxalyl, carboxy C₁-C₆ alkyl carbonyl, heterocyclyl carbonyl, heterocyclyl C₁-C₆ alkyl carbonyl, aryl C₁-C₆ alkyl heterocyclyl C₁-C₆ alkyl carbonyl, aryloxycarbonyl, and aryl C₁-C₆ alkoxycarbonyl, wherein the aryl and alkyl portions of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, amino C₁-C₆ alkyl, C₁-C₆ alkyl, C₁-C₆ alkoxy, and keto; and the heterocyclyl portion of W contains at least 4 hetero atoms selected from the group consisting of O, N, and S;

AA is an amino acid, the amine end of which is attached to the carboxyl end of Y; and

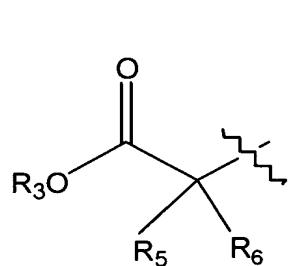
Z is an aryl C₁-C₆ alkylamino or arylheterocyclyl C₁-C₆ alkylamino;

or a salt thereof.

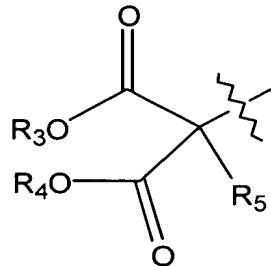
41. (Previously Presented) The compound of claim 40, wherein Y is of the formula XI:



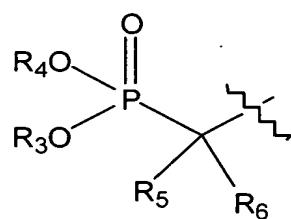
wherein D has the formula XII, XIII, or XIV:



(XII)



(XIII)



(XIV)

wherein R₃ and R₄ may be the same or different and are selected from the group consisting of hydrogen, C₁-C₆ alkyl, aryl, aryl C₁-C₆ alkyl, C₁-C₆ alkaryl, and heteroaryl; and R₅ and R₆ may be the same or different and are selected from the group consisting of hydrogen, halo, hydroxy, amino, and C₁-C₆ alkoxy; and

E is selected from the group consisting of hydrogen, C₁-C₆ alkyl, C₁-C₆ alkylcarbonyl, carboxyl, and C₁-C₆ alkylcarbonyl C₁-C₆ alkyl.

42. (Previously Presented) The compound of claim 41, wherein D is of formula XII.

43. (Previously Presented) The compound of claim 41, wherein D is of formula XIII.

44. (Previously Presented) The compound of claim 41, wherein D is of formula XIV.

45. (Previously Presented) The compound of claim 42, wherein E is hydrogen.

46. (Previously Presented) The compound of claim 42, wherein E is carboxyl.

47. (Previously Presented) The compound of claim 42, wherein R₃, R₄, R₅, and R₆ are hydrogen.

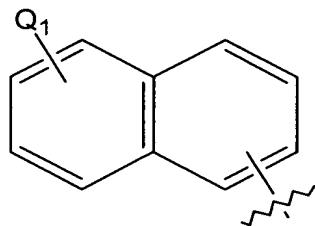
48. (Previously Presented) The compound of claim 44, wherein R₃ and R₄ are hydrogen.

49. (Previously Presented) The compound of claim 39, wherein W is selected from the group consisting of C₁-C₆ alkylcarbonyl, oxalyl, C₁-C₆ alkylaminooxalyl, arylaminooxalyl, aryl C₁-

C₆ alkylaminooxalyl, C₁-C₆ alkoxyoxalyl, carboxy C₁-C₆ alkyl carbonyl, heterocyclyl carbonyl, heterocyclyl C₁-C₆ alkyl carbonyl, aryl C₁-C₆ alkyl heterocyclyl C₁-C₆ alkyl carbonyl, aryloxycarbonyl, and aryl C₁-C₆ alkoxycarbonyl, wherein the aryl and alkyl portions of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, amino C₁-C₆ alkyl, C₁-C₆ alkyl, C₁-C₆ alkoxy, and keto; and the heterocyclyl portion of W contains at least 4 hetero atoms selected from the group consisting of O, N, and S.

67. (Previously Presented) The compound of claim 39, wherein Z is aryl C₁-C₆ alkylamino.

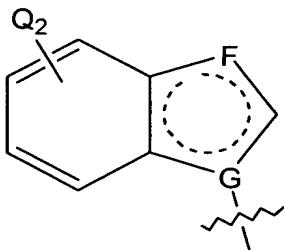
68. (Previously Presented) The compound of claim 67, wherein the aryl portion of Z has the formula:



wherein Q₁ is hydrogen or a substituent selected from the group consisting of hydroxyl, halo, C₁-C₆ alkyl, C₁-C₆ alkoxy, amino, and C₁-C₆ acylamino.

72. (Previously Presented) The compound of claim 39, wherein Z is aryl heterocyclyl C₁-C₆ alkylamino.

73. (Previously Presented) The compound of claim 72, wherein the heterocyclyl portion of Z has the formula:



wherein Q₂ is hydrogen or a substituent selected from the group consisting of hydroxyl, halo, C₁-C₆ alkyl, C₁-C₆ alkoxy, amino, and C₁-C₆ acylamino, and F and G are independently selected from the group consisting of C, N, O, and S.

78. (Previously Presented) The compound of claim 39, wherein said amino acid is selected from the group consisting of glycine, alanine, valine, norvaline, leucine, iso-leucine, norleucine, α -amino n-decanoic acid, serine, homoserine, threonine, methionine, cysteine, S-acetylaminomethyl-cysteine, proline, trans-3- and trans-4-hydroxyproline, phenylalanine, tyrosine, 4-aminophenylalanine, 4-nitrophenylalanine, 4-chlorophenylalanine, 4-carboxyphenylalanine, β -phenylserine β -hydroxyphenylalanine, phenylglycine, α -naphthylalanine, cyclohexylalanine, cyclohexylglycine, tryptophan, indoline-2-carboxylic acid, 1,2,3,4-tetrahydroisoquinoline-3-carboxylic acid, aspartic acid, asparagine, aminomalonic acid, aminomalonic acid monoamide, glutamic acid, glutamine, histidine, arginine, lysine, N'-benzyl-N'-methyl-lysine, N',N'-dibenzyl-lysine, 6-hydroxylysine, ornithine, α -aminocyclopentane carboxylic acid, α -aminocyclohexane carboxylic acid, α -aminocycloheptane carboxylic acid, α -(2-amino-2-norbornane)-carboxylic acid, α,γ -diaminobutyric acid, α,β -diaminopropionic acid, homophenylalanine, and α -tert-butylglycine.

85. (Previously Presented) A composition comprising a pharmacologically acceptable carrier and a compound of claim 39.

86. (Previously Presented) A method for inhibiting an SH2 domain from binding with a phosphoprotein comprising contacting an SH2 domain with a compound of claim 39.

91. (Previously Presented) A method for inhibiting SH2 domain binding comprising exposing a material containing an SH2 domain to a compound of claim 39.

92. (Previously Presented) A method for determining the presence of an SH2 domain in a material comprising:

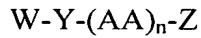
- (a) exposing a sample of said material to a SH2 binding compound and obtaining a first binding result;
- (b) exposing another sample of said material to a compound of claim 39 and obtaining a second binding result; and
- (c) comparing the first and second binding results to determine whether an SH2 domain is present in the material.

93. (Previously Presented) A method of preventing or treating a disease, state, or condition in a mammal comprising administering a compound of claim 39.

107. (Previously Presented) A method of enhancing the therapeutic effect of a treatment rendered to a mammal that has been afflicted with a disease, state, or condition, comprising administering to the mammal a compound of claim 39 in conjunction with the treatment.

113. (Previously Presented) A method of inhibiting the MAP kinase activity in a mammal comprising administering to the mammal a compound of claim 39.

116. (Previously Presented) A compound of the formula:



wherein n is 0 to 15;

Y is a phenylalanyl radical having a phenyl ring, an amine end, and a carboxyl end, the phenyl ring having (i) dicarboxy C₁-C₆ alkyl, (ii) hydroxyl and carboxy C₁-C₆ alkyl, (iii) carboxyl and carboxy C₁-C₆ alkyl, or (iv) dicarboxyhalo C₁-C₆ alkyl, or dicarboxyhalo C₁-C₆ alkyloxy; or an ester of (i), (ii), (iii), or (iv); wherein the alkyl portion of the substituents may be unsubstituted or substituted with a substituent selected from the group consisting of halo, hydroxy, carboxyl, amino, aminoalkyl, C₁-C₆ alkyl, C₁-C₆ alkoxy, and keto;

W is a moiety attached to the nitrogen of Y and is selected from the group consisting of C₁-C₆ alkylcarbonyl, oxalyl, C₁-C₆ alkylaminooxalyl, arylaminooxalyl, aryl C₁-C₆ alkylaminooxalyl, C₁-C₆ alkoxyoxalyl, carboxy C₁-C₆ alkyl carbonyl, heterocyclyl carbonyl, heterocyclyl C₁-C₆ alkyl carbonyl, aryl C₁-C₆ alkyl heterocyclyl C₁-C₆ alkyl carbonyl, aryloxycarbonyl, and aryl C₁-C₆ alkoxycarbonyl, wherein the aryl and alkyl portions of the substituents may be unsubstituted or substituted with a substituent selected from the group

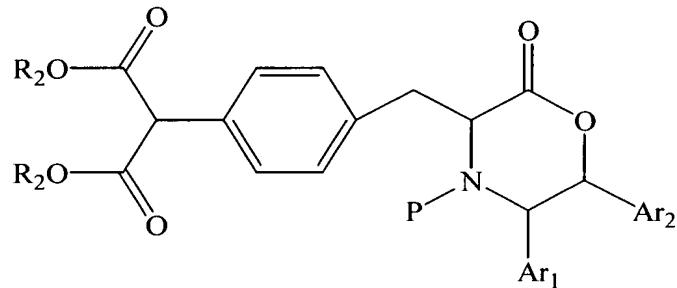
consisting of halo, hydroxy, carboxyl, amino, amino C₁-C₆ alkyl, C₁-C₆ alkyl, C₁-C₆ alkoxy, and keto; and the heterocyclyl portion of W contains at least 4 hetero atoms selected from the group consisting of O, N, and S;

AA is an amino acid, the amine end of which is attached to the carboxyl end of Y; and Z is an aryl C₁-C₆ alkylamino or arylheterocyclyl C₁-C₆ alkylamino; or a salt thereof.

117. (Previously Presented) A composition comprising a pharmacologically acceptable carrier and a compound of claim 116.

118. (Previously Presented) A method for inhibiting an SH2 domain from binding with a phosphoprotein comprising contacting an SH2 domain with a compound of claim 116.

119. (Previously Presented) A process for the preparation of a compound of formula VII:



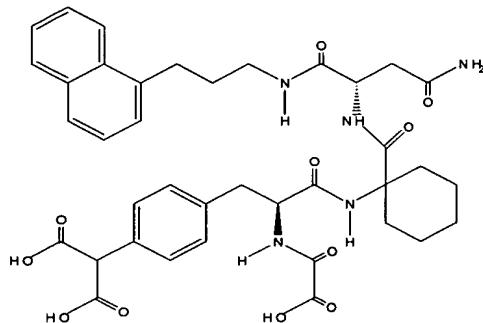
(VII),

wherein R₂ is alkyl, P is an amine protecting group, and Ar₁ and Ar₂ are aryl; the process comprising:

- (a) converting a p-halotoluene to a p-tolyl-malonic acid dialkyl ester by contacting the p-halotoluene with a dialkylmalonate and a cuprous halide;
- (b) halogenating the p-tolyl-malonic acid dialkyl ester to obtain a (4-halomethylphenyl)-malonic acid dialkyl ester; and
- (c) contacting the (4-halomethylphenyl)-malonic acid ester with a benzyl-6-oxo-2,3-diaryl-4-morpholine to obtain the compound of formula VII.

Please add the following new claims:

120. (New) The compound of claim 39, which is of the formula:



121. (New) A composition comprising a pharmacologically acceptable carrier and the compound of claim 120.

122. (New) A method for inhibiting an SH2 domain from binding with a phosphoprotein comprising contacting an SH2 domain with the compound of claim 120.

123. (New) A method of preventing or treating a disease, state, or condition, in a mammal comprising administering the compound of claim 120.